

## Upper limb motor and sensory system

Ensure proper exposure

Explain what the examination involves

### Inspection

Muscle bulk (wasting/hypertrophy)

Fasciculations

Abnormal movements (tremor, choreiform, tics, myoclonus)

### Tone

Check for cogwheel and lead pipe rigidity

### Power

Ask the patient to raise first the right arm and then the left one

Shoulder abduction: Ask the patient to hold arm outwards at their sides and keep them up. Explain that you will try to press down but they should not let you.

Shoulder adduction: Ask patient to push arms inwards against resistance from you.

Arm flexion: Stabilize elbow and ask patient to bend their elbow and pull you towards them. (Check both arms)

Arm extension: Ask patient to straighten flexed elbow against resistance and push you away. (both arms)

Wrist extension: Stabilize the wrist. Ask patient to clench fist and bend wrist up and not let you stop them. (both wrists)

Wrist flexion: Ask patient to push the other way against resistance from you.

Thumb abduction: Ask patient to hold hand with palm facing the ceiling and point thumb towards the ceiling against resistance applied by your finger.

Finger adduction: Tell patient to hold a piece of paper between their fingers and not let you take the paper out.

Finger abduction: Ask patient to spread fingers wide apart and not let you push them together.

### Reflexes (both sides)

Supinator

Biceps

### Sensations

Compare sensations on both sides for symmetry

Tell patient to say yes every time they feel you touch with cotton wool. Do not stroke as this tests tickle which travels in the spinothalamic tract.  
Touch: outer border of arm, lateral border of forearm, thumb, middle finger, little finger and medial border of forearm.

#### Joint position sense

Hold the distal interphalangeal joint of one finger. Explain to the patient that you will move the finger up and down. Show them both positions. Ask them to close their eyes and say if the finger is up or down.

#### Vibration sense

Make a fork vibrate silently. Place it on the patient's sternum and ask them if they can feel it. Now check on the distal interphalangeal joint of a finger with patients eyes closed.

#### C-ordination

Ask patient to touch your finger with their index finger and then touch their nose. Move patient's hand once to show how it's done so that it is clear. Tell them to do it quickly.